PART 1 – STATEWIDE MANAGEMENT

Department Policies

The Wildlife Policy of Idaho and mission statement for the Department is contained in Idaho Code, Section 36-103, which states:

> All wildlife, including all wild animals, wild birds, and fish, within the state of Idaho, is hereby declared to be the property of the state of Idaho. It shall be preserved, protected, perpetuated, and managed. It shall be only captured or taken at such times or places, under such conditions, or by such means, or in such manner, as will preserve, protect, and perpetuate such wildlife, and provide for the citizens of this state and, as by law permitted to others, continued supplies of such wildlife for hunting, fishing, and trapping.

In order to accomplish the Department's mission to preserve, protect, perpetuate and manage fish and wildlife resources and to provide for their use by the public, the following guiding principles have been developed:

Management

1. The Department will advocate that fish and wildlife receive equal treatment with all other resources in land and water management decisions.

2. The fish and wildlife resources of Idaho belong to the residents of the state and, while national interests will also be considered, these resources will be managed for the recreational and other legitimate benefits that can be derived primarily by the residents of Idaho.

3. Fish and wildlife management will be designed to provide a variety of consumptive and nonconsumptive recreational opportunities, as well as scientific and educational uses.

4. Fish and wildlife habitat and populations will be preserved, protected, perpetuated, and managed for their intrinsic and ecological values, as well as their direct benefit to man.

5. The Department will support sport fishing, hunting, and trapping as traditional and legitimate uses of Idaho's fish and wildlife resources.

6. The Department will manage wildlife at levels that provide for recreational opportunity but do not result in significant damage to private property.

7. The Department will use the best available biological and sociological information in making resource decisions and supports research efforts to provide state-of-the-art techniques and data.

Public Involvement

8. The Department will involve the public in the decision-making process, using a variety of formats, including public meetings, surveys, and working groups.

9. The Department is the principal government spokesman for Idaho's fish and wildlife resources and habitats and has a responsibility to inform interested citizens of potential threats to those resources.

10. The Department will promote and conduct training and educational programs that emphasize sportsmanship, outdoor skills, ethical outdoor behavior, the needs of fish and wildlife, and the wise use and appreciation of fish and wildlife resources.

11. The Department will provide information on Idaho's hunting and fishing to identify recreational opportunities and to meet specific management goals.

12. The Department will emphasize individual recreational opportunities rather than promoting contests or competitions, or activities that may result in commercialization of fish and wildlife resources.

Rules

13. Within the range of biologically sound alternatives, the Department will consider legal and economic factors, desires of the sporting public, social acceptability, and administrative feasibility when promulgating rules.

14. Rules will be designed for ease of understanding and will include only those restrictions necessary to meet desired management objectives.

Access

15. On land open to the public, the Department will advocate access that provides a variety of fish- and wildlife-associated recreational opportunities while achieving habitat and population management goals.

16. The Department will cooperate with sportsmen and landowners to minimize negative impacts of outdoor recreation on private lands and ensure the continued availability of recreational access by permission to private lands for wildlife-associated recreation.

17. The Department will actively pursue acquiring easements, leasing, or purchase and development of key areas to provide access for anglers and other recreationists. Priority will be given to easements collaboratively developed with landowners.

Importations and Introductions

18. Maintaining self-perpetuating populations of fish and wildlife will receive priority over stocking programs.

19. Introduction of fish and wildlife species may be considered when (1) substantial benefits are anticipated; (2) sufficient and suitable habitat is available; (3) impacts to native species

are acceptable; and (4) where necessary, approval is obtained from appropriate agencies or private landholders.

20. The Department will advocate strict controls on the importation and introduction of exotic fish and wildlife.

Land Acquisition

21. The Department will focus land acquisition efforts on critical habitats, particularly wetlands, access to waterways, and land adjacent to existing Wildlife Management Areas.

22. The Department will support payment of a fee in lieu of taxes for unimproved real property it owns or holds.

23. The Department will control noxious weeds on Department-owned lands.

Cooperation with other Agencies

24. Agreements with other governing agencies will be developed to insure cooperative management of fish and wildlife resources shared in common.

25. The Department will advocate land management practices that protect, restore, and enhance fish and wildlife habitat, especially habitats such as wetlands and riparian areas that benefit a wide variety of fish and wildlife species.

26. Cooperation and assistance will be provided in the development of fish and wildlife management plans and educational programs where benefits accrue to the general public.

Native Americans

27. Native American treaty rights will be recognized in the management of fish and wildlife.

Outfitting

28. The Department will oppose the issuance of outfitting licenses and special use permits where the impacts to fish and wildlife resources are unacceptable or the opportunity for non-guided recreation is significantly impaired.

29. The Department will request that outfitting licenses be specific to individual waters so that outfitting activities can be customized to fit social and biological needs.

30. The Department will not place additional fishing restrictions on outfitters that are not already required of the public, without specific Commission approval.

Habitat Protection

31. The Department will actively support and participate in efforts to protect or enhance the quality of water in Idaho's lakes, rivers, and streams.

32. The Department will oppose legislation, land and water use activities, policies or programs that result in significant and unwarranted loss of fish and wildlife habitat or populations and will advocate project designs that minimize or eliminate such losses.

33. The Department will advocate strictly-controlled use of pesticides and other substances that can result in direct or indirect mortality to fish or wildlife and their replacement with less toxic materials or elimination wherever possible.

Mitigation

34. Whenever unavoidable fish and wildlife habitat or population losses occur, the Department will, where practical and legally possible, actively seek compensation under the following guidelines:

For long-term losses caused by habitat elimination or degradation, compensation by acquisition and improvement of alternate habitat will be sought rather than monetary restitution. Compensation must be permanent and include funding necessary for annual operations, maintenance, and monitoring if these are required to insure that target goals for fish and wildlife benefits are achieved.

Monetary restitution, based on costs to replace lost resources, will be sought for losses caused by direct mortality if replacement of animals is not feasible.

Whenever possible, replacement of losses will be by the same fish and wildlife species or by habitat capable of producing the same species that suffered the loss, and compensation programs will be located in the immediate area of loss.

Offsite locations and different species may be substituted in compensation programs if "onsite" and "in kind" compensation is not possible.

Compensation levels will be based on loss of habitat and loss of potential for fish and wildlife production and recreation rather than numbers of animals or days of use of animals occurring at the time of loss.

In jointly funded projects requiring fish and wildlife mitigation, participating entities will share mitigation credit proportional to their contribution.

Enforcement

35. The Department will seek to reduce illegal activities that result in the taking of fish or wildlife or which damage fish or wildlife habitat.

Fisheries Policies

1. Idaho waters will be managed to provide optimum sport fishery benefits.

2. Protection and restoration of fish habitat and water quality will be a top priority in the management program.

3. Wild native populations of resident and anadromous fish species will receive priority consideration in management decisions.

4. Management decisions will emphasize maintenance of self-sustaining populations of fish.

5. The Department will oppose any activity that results in significant loss or degradation of habitat capable of supporting self-sustaining fish populations.

6. Factors affecting downstream smolt survival will receive priority attention in anadromous fish management.

7. Hatchery-reared fish will be stocked as appropriate to preserve, establish, or reestablish depleted fish populations and to provide angling opportunity to the general public.

8. The Department will strive to maintain genetic integrity of wild native stocks of fish (resident and anadromous) and naturally managed fish when using hatchery supplementation.

9. Non-native species of fish will be introduced only in waters where they are not expected to adversely impact stocks of wild native fish.

10. Department funds will not be used to manage waters closed to public fishing access, except where such closures are part of a Department-approved management program.

11. The Department's actions and responses for salmon and steelhead will be guided by the following, based on available information (IFGC Policy May 8, 1998):

- The mainstem dam and reservoir system in the lower Snake and Columbia rivers is the primary factor limiting recovery of Idaho's wild salmon and steelhead;

- Smolt transportation has not compensated for the dams;

- The natural river option (removal of the earthen portion of the four lower Snake River dams in Washington to create a free-flowing segment of the Snake River) is the best biological choice among the options for recovery of Idaho's wild salmon and steelhead. The Department will support continued state and regional consideration of the natural river option so that a fully informed, recovery decision can be made by the region;

- The Department will assess the "next best" strategies in the event the natural river option is not adopted as a recovery measure;

- Social and economic concerns must be also considered, and if necessary mitigated, for any recovery decision to be successful.

Natural Resources Policy Bureau Policies Relating To Fisheries

1. The Department will provide timely reviews of projects that affect Idaho's fish and wildlife resources, based solely on potential effects on those resources and their recreational use and will suggest means of eliminating or reducing adverse impacts.

2. The Department will maintain effective channels of communication with others concerned with management of Idaho's land and water resources, to insure that fish and wildlife resources are considered in planning activities.

3. The Department will support and participate in efforts to eliminate non-point sources of pollution to Idaho waters, restore water quality where needed, and to protect or restore beneficial uses.

4. The Department will work with developers and the Federal Energy Regulatory Commission to insure that hydroelectric development on Idaho waters will have benign impacts to aquatic resources.

5. The Department will strive to insure that adequate flows remain in Idaho streams to protect aquatic and riparian resources and provide for fish- and wildlife-oriented recreation.

6. The Department will oppose hydroelectric development on rivers designated as "protected" by the Northwest Power Planning Council unless the project has a benign impact on fish and wildlife resources, or provides an exceptional benefit to fish and wildlife.

7. The Department will support and participate in efforts to develop a State Protected River System and the inclusion of important fish and wildlife habitats into that system.

8. The Department will develop cooperative agreements for the management and enforcement of road closure areas involving both public and private lands.

Statewide Fisheries Management Goals

1. Increase sport-fishing opportunities in Idaho.

2. Provide a diversity of angling opportunities of types desired by the public.

3. Maintain or enhance the quality of fish habitat.

4. Fully utilize fish habitat capabilities by increasing populations of suitable fish species to carrying capacity of the habitat.

5. Maintain or improve angler success rates for fishable species.

6. Maintain or restore wild native populations of fish in suitable waters.

Idaho Anglers And Their Preferences

To obtain anglers' input for development of the 2001-2006 Fisheries Management Plan, the Department conducted a mail survey of 10,800 resident Idaho anglers and 1,200 non-resident anglers in 1999. Similar surveys were conducted in 1967, 1977, 1987, and 1994. Names were selected at random from a list of all types of fishing license buyers, resident and non-resident. A total of 12,000 fishing license buyers were selected to ensure statistically valid estimates from a minimum of 600 respondents for each of the Department's seven regions.

Angler Characteristics

As in previous surveys, residents constitute about two-thirds of the anglers who fish in Idaho. The greatest numbers of resident anglers live in the Southwest (38%) and Panhandle (14%) regions and the least live in the Salmon Region (1%). This is a significant shift from 1994 when 22% resided in the Southwest Region and 4% resided in the Salmon Region (Table 1). The majority of non-residents came from Utah (22%), Washington (21.5%), and California (14.6%).

Table 1. Percent Of Fishing License Holders By Region

Region	1994	1999
Panhandle	13.2	13.7
Clearwater	14.8	9.6
Southwest	22.2	38.0
Magic Valley	16.0	13.4
Southeast	14.6	12.3
Upper Snake River	15.6	11.7
Salmon	3.6	1.3

Total number of licenses sold 446,726.

Nation-wide, participation in fishing by youths has been declining. As our daily lives become increasingly hectic, competing recreational activities have reduced the level of participation in fishing activities. However survey respondents said that 72% of the children under the age of 14 that are living at home fish, a significant increase from 1987 when only 30% under the age of 14 fished. In the next five years the Department will continue it's efforts to educate our youths by providing fishing clinics, in-classroom education, expansion of the rod-loaner program and providing additional family fishing opportunities.

Fishing Habits

With the vast majority of Idaho's population living almost within sight of the Snake River, it was the body of water that was most frequently listed by anglers when asked to name their three most frequently fished waters. The Salmon, Henrys Fork Snake, Clearwater, and Boise rivers ranked 2, 4, 7, and 9 while Henrys Lake, Lake Coeur d'Alene, Cascade Reservoir, C.J. Strike Reservoir, and Chesterfield Reservoir were the most popular lakes and reservoirs. They finished 3, 5, 6, 8 and 10 respectively, as the most frequently fished waters.

Trout remain the bread and butter fish of Idaho (Table 2). When asked what three species they most preferred to fish for, just over 50% of anglers listed "trout" as one of the three. Other top preferred species (and the percent of anglers listing them) were bass (15%), steelhead (9%), rainbow trout (6%), salmon (6%), cutthroat trout (4%), catfish (4%), crappie (4%), brown trout (3%), and perch (3%).

In 1997, anglers fished an average of 9.2 days per year and anglers reported fishing an average of 18.4 days in 1994. In 1999, the average number of days fished was 18.84,slightly higher than our previous survey. This is a trend that has been projected nationwide.

Six out of ten angler days in 1999 were spent on lakes or reservoirs, up somewhat from previous surveys. Half of the angling effort in 1999 was specifically directed toward "trout." About 10% of the effort was directed toward other coldwater species such as steelhead, kokanee, whitefish, and landlocked chinook. Similar to results of the 1994 survey, about 30% of angler days in 1999 were spent pursuing warmwater species.

Table 2. Most preferred species of fish sought by anglers in Idaho, 1999.

Coldwater	79.2%	Warmwater	20%
Any trout	50.7	Any bass	8.0
Rainbow trout	7.6	Walleye	2.6
Steelhead trout	7.5	Crappie	2.3
Cutthroat trout	4.1	Catfish	1.7
Anadromous chinook	3.2	Perch	1.3
Brown trout	2.5	Smallmouth bass	1.1
Kokanee	1.9	Largemouth bass	1.0
Brook trout	1.2	Bluegill	1.0
Lake trout	0.5	Sturgeon	1.0

Fish Management

Idaho has roughly 26,000 miles of fishable streams and 202 major lowland lakes and reservoirs. Basic habitat conditions have the greatest influence on what kinds and how many fish aquatic habitat will support. Lowland lakes and reservoirs generally support many kinds of fish from warmwater to trout species. Different management strategies involving stocking and special fishing rules are used to best provide the diversity of fishing that anglers want.

Fishing rules are one of the main tools used to "manage" fish populations and provide different types of angling experiences, but they can also be very controversial. Figure 2 shows a distribution to catch-and-release waters, general season waters, and special rule waters.

To help the Department manage Idaho fisheries, the survey asked a number of questions about what types of fishing Idaho anglers want and how they feel about special rules.

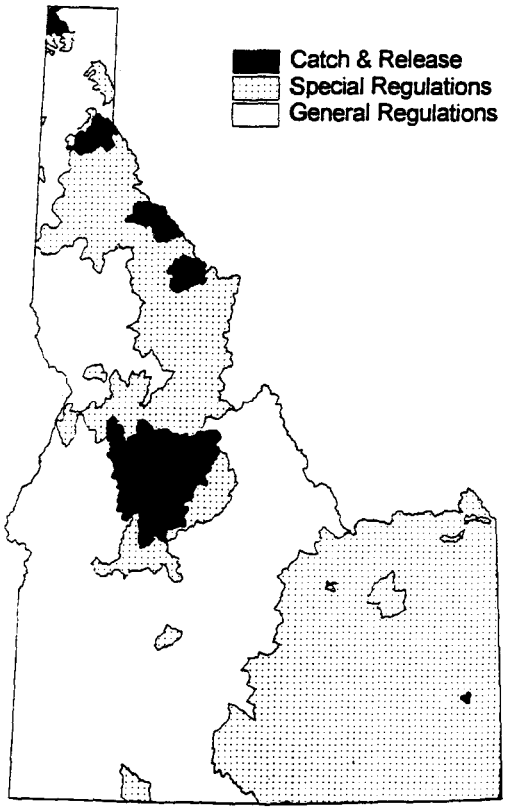

Figure 2. Special Rules Area – 2000-2001

Quality and Trophy Size Management

Anglers were asked if they would like more, fewer, or the same number of waters managed with special rules that require some sizes of fish to be released in order to have more and larger fish to catch, but not harvest. Forty-seven percent of the anglers said they wanted more waters managed this way for trout, 33% wanted no change and 20% had no opinion. In a follow up question, 60% of the anglers said they supported restrictive rules if they would result in increase in numbers and sizes of trout, a few supported restrictive rules even if they did not change the fish population, and 25% did not support restrictive rules at all unless the trout population was in danger of overharvest. In response to the same question concerning bass management, 42% wanted more waters managed this way, 24% wanted no change and 34% had no opinion

Funding

Anglers were asked how they would spend $100 on improving Idaho's fishing and protecting the resource. Respondents indicated that hatchery trout for streams and habitat protection should receive the most, $17.82 and $17.73 respectively. Hatchery trout for lakes ($17.29), protection and enhancement of wild trout ($17.02), salmon and steelhead fisheries ($12.74), enforcement ($12.03) and warmwater fisheries ($5.36) received lesser amounts.

Fishing Information

By a margin of nearly two to one, anglers indicated that they would like to get more information from the Department. When asked how they would like to receive this information, they indicated that they would like more brochures (49%) and 26% said that they wanted information via the Internet. In a related question, 66% of the respondents have access to the Internet and the Department has seen a dramatic increase in the number of Internet inquiries it now receives.

Other Items

Anglers around the state make many suggestions to the Department on things they would like to see in the fisheries management program. Many decisions are made primarily based on what is best for the resource. Other decisions are made almost entirely as a matter of public preference. It is important for the Department to hear the views of all anglers, not just organized groups or anglers with special fishery interests. A survey, such as our random mail survey, gives an unbiased picture of the angling public as a whole.

On-going Angler Direction

The previous five-year plan was guided by angler input, which set the stage for continuing that direction in the current plan. Several of the major directions are listed below:

- The general Idaho angler seems quite satisfied with the quality of the Department's hatchery trout product. However, 57% of respondents said that they would not favor reducing the number of 9-inch fish the Department stocks in favor of larger fish.

- The average size of bass, which anglers indicated was acceptable to keep if not restricted was 12 inches. A 16-inch bass was the size most often considered as quality size for both largemouth and smallmouth bass.

- Forty-seven percent of the anglers indicated that the Department should spend about the same effort on managing wild/native species, while 43% thought the Department should be spending more.

- Anglers feel the current limit of six trout is adequate.

Program Direction

Based on the 1999 Idaho Angler Opinion Survey and angler input through other means, the following are the major areas of concern and program directions desired by Idaho anglers and approaches proposed to meet them. The underlying theme for the next six years is the most frequent comment received: support for current programs and direction. Continue that course.

1. Increase emphasis on habitat protection.

2. Provide a diversity of angling opportunities.

3. Provide increased family fishing opportunities and manage as consumptive fisheries with simple fishing rules.

4. Continue quality and trophy fishing opportunities.

5. Continue emphasis on protection and enhancement of wild/native trout.

6. Continue emphasis on hatchery trout programs in streams, lakes, and reservoirs.

7. Continue emphasis on protection and enhancement of salmon and steelhead.

8. Provide additional angling information to the public.

9. Provide increased access, particularly for bank anglers.

10. Provide educational programs to encourage youths to fish.

11. Simplify and standardize fishing rules.

1. Increase Emphasis on Habitat Protection.

The angling public surveyed consistently says the Department should increase emphasis on habitat protection. We will work with land management agencies (U.S. Bureau of Land Management, U.S. Forest Service, Idaho Department of Lands), water management agencies (U.S. Bureau of Reclamation, U.S. Army Corps of Engineers, Idaho Department of Water Resources), Idaho Department of Environmental Quality, private landowners, and regulatory agencies (Idaho Department of Health and Welfare, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, Federal Energy Regulatory Commission) to reduce impacts of land-disturbing activities, improve management practices, and enforce water quality standards. Biologically meaningful minimum flows will be sought to maintain healthy fisheries or to restore fisheries degraded by insufficient flows.

The 1989 Legislature created antidegradation legislation and established two positions for the Department to address this issue. These positions have helped to address immediate habitat concerns, particularly degradation. The Department established environmental staff biologists in six of the seven regions during the 1990s to help with these processes and to assist landowners with habitat related issues. The level of support will continue during this plan.

Environmental staff biologists contribute to greater public awareness of habitat issues and education of the public on how to prevent or minimize problems. Additionally, they provide fishery input needed to develop and implement programs to correct past problems. The coordinators provide recommendations and assistance for programs such as use of grazing systems, fencing of key streams to prevent grazing impacts, streambank stabilization projects, revegetation projects, and best management practices for logging and farming. Such programs improve fish habitat.

Expansion of volunteer help in habitat protection or rehabilitation programs will be pursued during this planning period. This has increased public awareness of habitat importance and expanded the public's feeling of ownership in the programs.

2. Provide a Diversity of Angling Opportunity.

A mixture of hatchery and wild trout management and general, quality, and trophy management regulations for cold and warmwater species will be used to provide diverse angling opportunities within geographic areas. A diversity of angling opportunity, especially near population centers, may invite greater use and increased angler satisfaction.

The Department currently stocks 19 different fish species and 16 additional "strains" to provide a diversity of angling opportunities. Some of these species may be proposed for introduction in lakes and reservoirs to continue providing a diversity of species available within various geographical areas. Other game fish and forage fish species may be considered for introduction into Idaho waters on a case-by-case basis. However, intensive studies of new species introductions and their potential effects on wild trout and other existing species, particularly native species, will be made prior to any introductions.

3. Provide Increased Family Fishing Opportunity and Manage as Consumptive Fisheries with Simple Fishing Rules.

Providing information on available fishing areas and increasing angler access will serve to increase family fishing opportunities. During the past five years the Department developed or renovated several fishing ponds. During this six-year period the Department will continue to identify and develop new fishing waters near populated areas to provide increased fishing opportunities without detracting from existing hatchery-supported fisheries. This will benefit family groups and novice anglers who traditionally do not travel far to participate in fishing activities.

4. Continue Quality and Trophy Fishing Opportunities.

As the Angler Opinion Survey points out, the quality of an angling experience is affected by many factors. Within this plan, however, the terms "quality" and "trophy" are used to refer to the size of fish being managed. (See Quality and Trophy Fish Management Program Descriptions for definitions.) A quality or trophy fishery is one specifically managed to limit harvest in some way to provide enhanced catch rates and/or larger fish.

During this six-year period, the Department proposes to manage existing quality and trophy waters for those specific purposes and establish additional quality and trophy waters. The demand for trophy trout fishing opportunities is particularly high in southwest Idaho. The Department will work towards satisfying that demand by acquisition of new waters or development of existing waters.

5. Continue Emphasis on Protection and Enhancement of Wild Trout.

During this six-year period, the Department will continue to emphasize protection and enhancement of wild trout in several ways. The program measures described in the habitat protection section will be one of the most important. These measures strive to both maintain existing habitat quality and enhance habitat to improve wild trout populations. The Department will continue a major program of "wild trout management" which is described in more detail in a following section.

Under this program, the Department will manage for wild trout in streams and lakes with the potential to support acceptable fisheries on wild trout alone. This may involve varying levels of harvest regulation necessary to maintain catch rates and protect wild/native trout.

The Department will also strive to control overharvest and mortality of wild trout through nonregulatory means. Public information materials and programs will be used to promote nonconsumptive values of wild trout and educate anglers on release methods to minimize hooking mortality.

Additional measures to protect spawning wild trout or young fish in rearing streams where they are especially vulnerable to overharvest may be necessary. Harvest restrictions or catch-and-release rules should be utilized where possible, with fishing closures used only where biologically necessary.

The Department continues to undertake measures to restore wild trout access to streams where culverts, diversions, and other manmade structures have blocked passage. The Department will advocate that agencies responsible for road construction and development of water resources utilize state-of-the-art irrigation techniques, incorporate fish passage criteria, and reconnect interrupted stream segments to restore wild trout habitat and access to it. The Department will require passage facilities and screens on new structures and will work with owners of existing structures to provide and maintain wild trout access.

6. Continue Emphasis on Hatchery Trout Programs in Streams, Lakes, and Reservoirs.

The Department proposes to maintain current emphasis on hatchery trout programs in streams where there is convenient angler access, the return to anglers is good, and stocking does not negatively impact native species. Where hatchery fish are stocked in waters accessible to wild/native fish, all fish stocked will be sterile unless there is a need to supplement wild/native fish with hatchery stocks. Streams may be designated as "put-and-take" trout streams, which will be identified in brochures and maps made available to anglers. Put-and-take waters are expected to return 40% of stocked trout to the angler catch.

Planting larger numbers of fingerling and 5- to 7-inch put-and-grow sized trout in the fall where natural food and overwinter survival conditions are good may enhance hatchery trout programs in lakes and reservoirs. Put-and-grow fisheries are expected to return 100% of the weight stocked to the angler catch.

Where harvest restrictions are necessary to maintain or restore wild/native trout populations in streams, lakes, and reservoirs, harvest opportunity may be provided by marked hatchery fish. A more in-depth description of hatchery trout programs is provided in a following section.

7. Continue Emphasis on Protection and Restoration of Salmon and Steelhead.

The range (Figure 3) and abundance (Figure 4) of anadromous salmon and steelhead in Idaho are reduced from historical conditions. About 62% of Idaho's historic spawning and rearing habitat for spring and summer chinook salmon remains available. A similar amount of steelhead habitat remains. Current habitat is estimated as capable of producing up to 6.7 million spring/summer chinook smolts and 3.1 million steelhead smolts at 70% of rearing capacity (IDFG 1992). Approximately 25% of the historical surface area of sockeye salmon nursery lakes in Idaho remains accessible. The greatest loss of production habitat has occurred for Snake River fall chinook salmon, for which only 17% of the historical habitat is currently accessible. Approximately 30% of Idaho's streams inhabited by salmon and steelhead are located within areas designated as wilderness or waterways classified as wild and scenic rivers. This increases to over 50% with unroaded and undeveloped drainages included.

Within the existing range of salmon and steelhead, the reduction in abundance of naturally produced salmon and steelhead has been severe. As an example, the 5-year average redd count for spring chinook in the Middle Fork Salmon River, a wilderness sanctuary for native spring chinook, has decreased from 1,575 (1957 - 1961) to 142 (1995 - 1999), a 91% decline. A primary factor in the decline of Idaho's once productive anadromous fish stocks has been development of the Snake and Columbia rivers' hydroelectric system. Direct and delayed mortality associated with adverse migration conditions through federal hydropower dams and reservoirs has reduced fish survival. Transportation of juvenile salmon and steelhead has failed to reduce direct and delayed mortality associated with the hydrosystem enough to avoid population declines. Habitat degradation and mixed-stock fisheries for some stocks of salmon and steelhead have also contributed to the decline. Drought and poor ocean rearing conditions during the early to mid-1990s, and burgeoning avian and pinniped predator populations, have exacerbated the mortality problems for anadromous salmon and steelhead. Since 1991, almost all of Idaho’s naturally produced anadromous fish have been listed (see section on Federally Listed Species). Some hatchery populations are also listed. A notable exception is that natural and hatchery spring chinook salmon in the Clearwater River drainage were not listed because they were considered the product of previous reintroduction. The National Marine Fisheries Service (NMFS) is the federal authority in charge of Snake River salmon and steelhead recovery as listed species. The result of federal listings is that actions to protect or enhance Idaho's salmon and steelhead in Idaho and the Columbia Basin must be consistent with the federal recovery plan and standards.

The Department’s regulatory authority is limited to hatchery, harvest, and fish management activities to enhance listed salmon and steelhead. The Department's goal is to preserve Idaho's salmon and steelhead runs and to recover them to provide benefit for all users. Efforts to achieve improved survival of Snake River salmon and steelhead intensified during the 1990s, including the regional, collaborative, scientific process, termed “Plan for Analyzing and Testing Hypotheses”, PATH (Marmorek et al. 1998). Such effort will remain an important management activity. Improvement in juvenile and adult survival associated with migration through the lower Snake and Columbia rivers provide our best opportunity for enhancement of all salmon and steelhead populations, wild or hatchery, in Idaho (IFGC Policy, May, 1998). Priorities will continue to be directed at using the Department’s technical expertise to improve survival associated with juvenile and adult migration through the federal hydroelectric system. The role of the Department is to help strengthen the scientific foundation from which various management alternatives are considered and assess these alternatives from a biological and

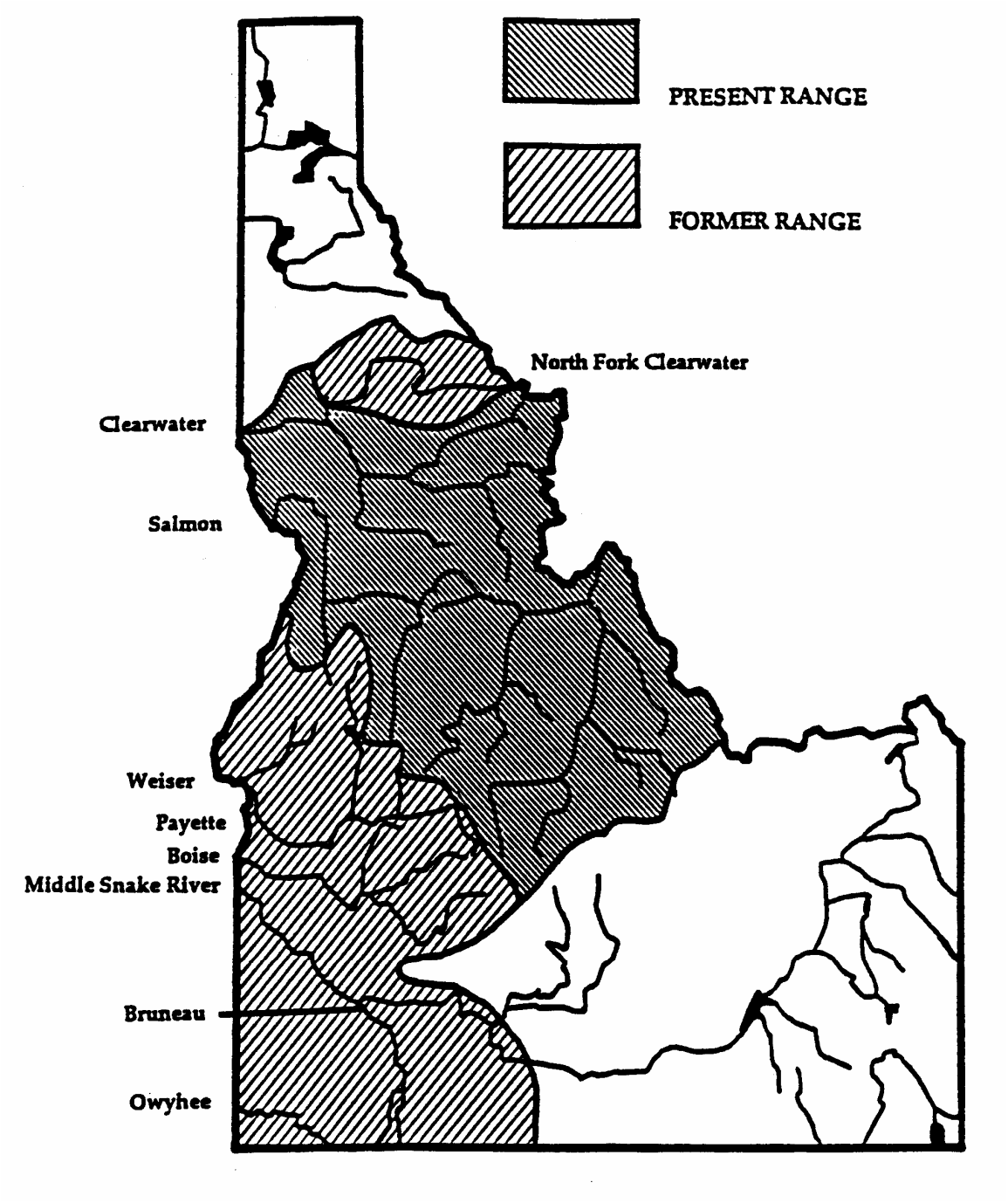

Figure 3. Former and present range of anadromous fish in Idaho.

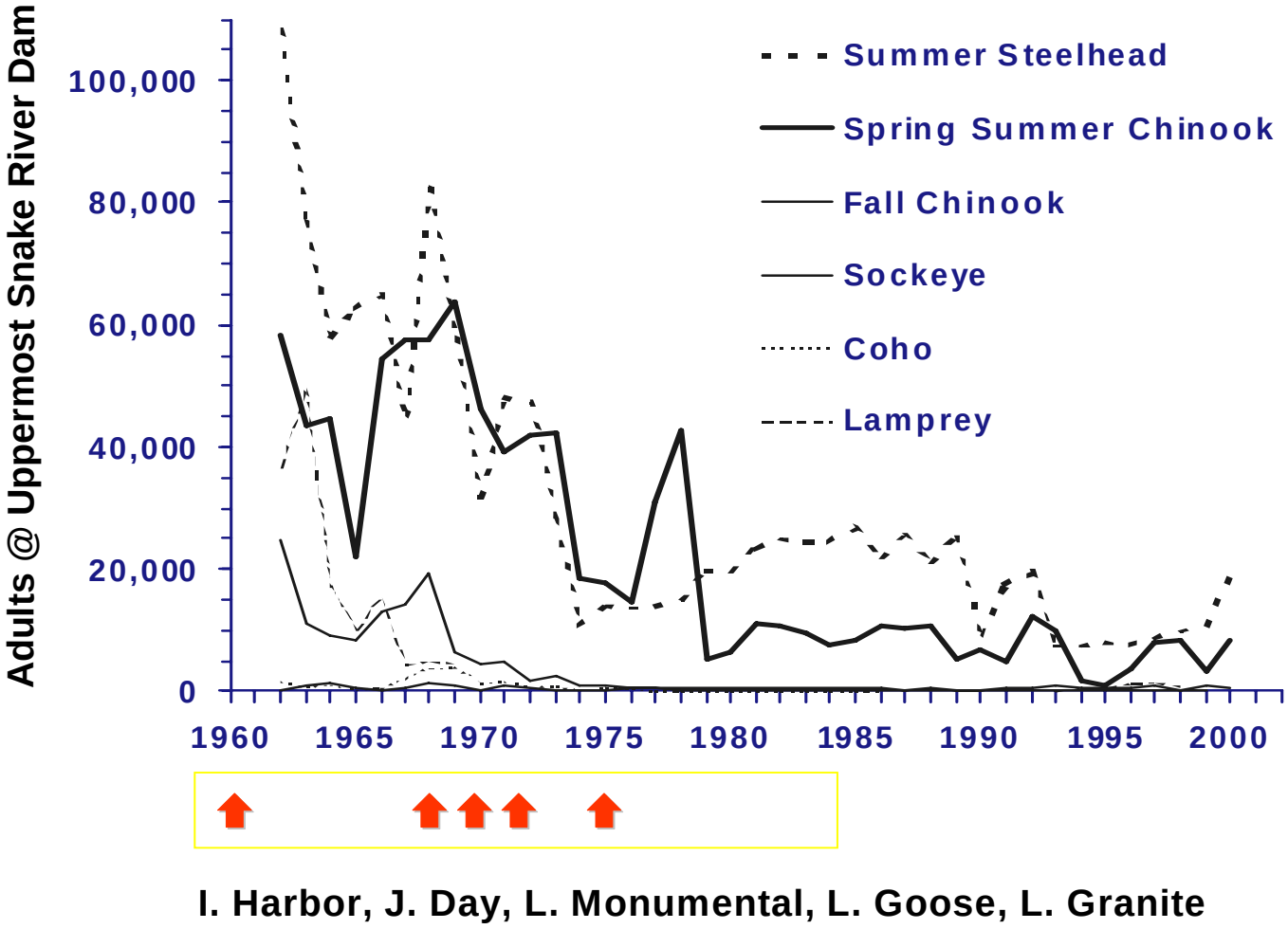

Figure 4. Number of wild anadromous adults at the uppermost Snake River Dam.

scientific basis. A strong scientific foundation for conservation decisions will be critical as recovery planning moves forward for Idaho's salmon and steelhead.

Because the configuration of federal dams and reservoirs is unlikely to change during the next five years, the department will work to ensure that more aggressive actions are taken to address significant sources of direct and delayed discretionary mortality while the Columbia region initiates longer-term recovery planning. Improvements in reservoir and dam passage, as well as near-term predator controls for out-of-balance fish, bird, and mammal populations have been identified for action. Key to near- and long-term actions will be risk assessment to judge effectiveness of actions within the context of environmental variability (State of Idaho 2000). The Department will provide objective risk assessment to decision-makers and the public that integrates environmental conditions with management actions to gauge recovery progress and need for additional improvement.

The Department administers and implements hatchery programs to fulfill fishery mitigation responsibilities from private and federal dams. Hatchery facilities to produce a total of about 20 million salmon and steelhead smolts are in operation as partial mitigation for losses to Idaho runs attributed to private and federal hydroelectric dams. However, low smolt-to-adult survival of spring and summer chinook salmon smolts produced by these facilities has not returned enough adults in most years to meet program goals. Mitigation planning expected returns three to four times better for both hatchery and naturally produced fish than those occurring.

As a result of unprecedented low runs of naturally-produced salmon, the Department increased emphasis on preserving the numerous subpopulations of native salmon that are genetically and ecologically adapted to return, spawn, and rear in Idaho. Evaluation of supplementing natural salmon and steelhead populations using Idaho's existing hatcheries is continuing utilizing parr and smolt life stages and artificially spawned anadromous adults. Recommendations are expected within the next five years that will help determine the efficacy of using our current hatcheries to aid recovery, guide new production capital investments, yet still provide the benefit of fishery mitigation.

The Department has continued the captive breeding program to perpetuate the few Snake River sockeye in existence primarily in Redfish Lake, near Stanley. This program, initiated in 1991, is considered an experimental preservation effort where the major mortality phase of migration to the ocean is bypassed. Juvenile fish are reared to adulthood in a hatchery and then spawned artificially. Due to historic low spring and summer chinook adult returns in 1994-95, the Department initiated additional preservation experiments to test the efficacy of captive techniques. Experiments are being conducted with chinook salmon in the East Fork of the Salmon River, the West Fork of the Yankee Fork River, and the Lemhi River in conjunction with tribal and federal fish managers. Similar to the captive breeding program for sockeye, juvenile fish are reared to maturity in a hatchery, but are released as adults to spawn naturally. This technique is called "captive rearing."

The Department will continue to test hatchery intervention strategies and implement where necessary and ecologically prudent to provide a safety net for selected populations at risk. Implementation of these measures must carefully balance the genetic and demographic risks of these unproven hatchery intervention strategies with the imminent risk of extinction. Because of uncertainties in approach and effectiveness of hatchery intervention strategies, as well as the need for evaluation, the Department will implement a suite of approaches coupled with

continued support of anadromous refuge areas without hatchery intervention. New, additional preservation programs initiated by the Department involving hatchery captivity or other hatchery production of listed salmon and steelhead will be guided by these strategies. This approach will also guide Department cooperation with supplementation efforts initiated by tribal or federal managers. New steelhead supplementation actions will be implemented and evaluated during the plan period. These will focus on use of locally returning hatchery stock that did not originate from the target population in areas where wild steelhead have essentially been extirpated. One or two natural steelhead populations (hatchery influenced but reproducing naturally) will be utilized as supplementation broodstocks. Nutrient additions will also be implemented where feasible in conjunction with the supplementation experimental design and will be coordinated and evaluated with tribal and federal managers.

The wild salmon and steelhead management program, which includes a diversity of genetic refugia, will be maintained. Idaho's large areas of natural, native fish production, much of which is in areas classified as wilderness or Wild and Scenic Rivers, are critical to genetic preservation and evaluation of wild fish production and trends. These areas also act as controls for evaluation of supplementation actions.

Hatchery salmon and steelhead programs that provide fishery mitigation have been modified to reduce potential ecological effects to listed fish and to provide greater program benefit. Modifications include altering release sites and numbers. An acclimation/release pond for steelhead smolts was built in the upper Salmon River drainage to reduce instream density and residualism. Evaluation of the current pond program will guide development of additional measures to reduce interactions between natural and hatchery juveniles. Work will continue on hatchery production priorities such as improvement of fish health and smolt quality factors most likely associated with early migration mortality.

Selective sport fisheries safeguarding naturally produced salmon and steelhead while providing fishing opportunity for surplus hatchery fish will be designed and implemented when sufficient surplus occurs. The Department has utilized a guideline such that if at least 80% of hatchery broodstock escapement will be achieved, then sport fisheries can be considered. The primary implementation tool for selective fisheries will be adipose fin-clipping hatchery chinook and steelhead targeted for sport harvest. Chinook salmon fisheries similar to the 1997, 1998, and 2000 fisheries are projected during the first two years of this plan cycle (Figure 5). Steelhead harvest should remain within the range of the last five years, averaging 39% of the hatchery steelhead run crossing Lower Granite Dam (Figure 6). The Department will assess feasibility of expanding hatchery chinook sport-fishing opportunity into the lower Salmon River and the Snake River. A key criterion will be negligible impact to listed salmon commingled with harvestable hatchery salmon. The Department will continue to use offsite fishery areas if necessary to reduce impacts to listed species while providing fishing opportunity. This can be accomplished by transporting surplus hatchery fish to non-anadromous water, such as the Boise River, for fishing.

Although the Department has little direct authority regarding anadromous fish habitat in Idaho, the goal will be to work with federal, state, and private landowners to maintain current good quality habitat and fish populations to use it. Opportunities to improve habitat to increase inbasin juvenile fish survival will be pursued to preclude extinction and maintain recovery options. One emphasis will be improvement of tributary streamflow and connectivity in the upper Salmon River drainage. The Department will use the screen mitigation program resources and expertise to work with landowners to develop legal, practical solutions to low stream flows that protect fish

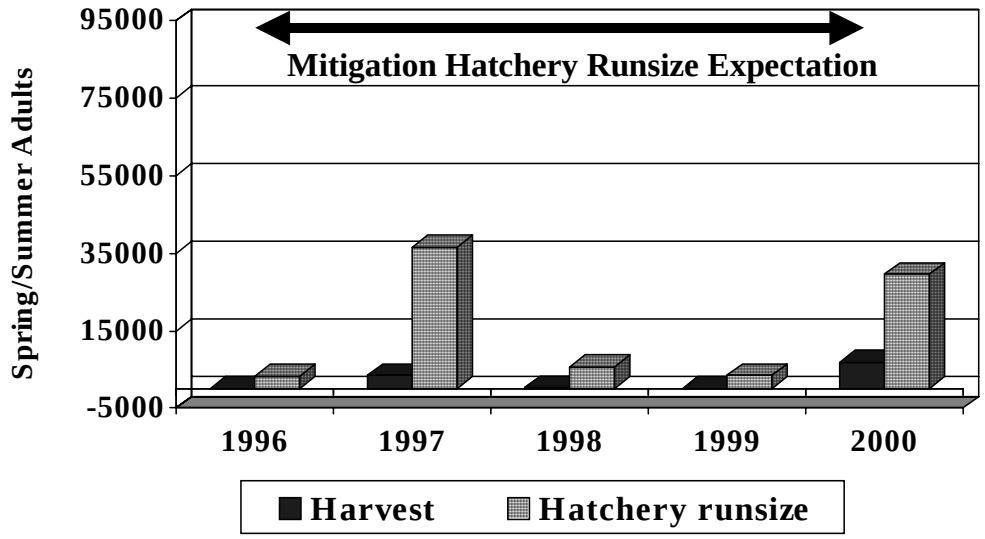

Figure 5. Idaho adult hatchery chinook salmon sport harvest and hatchery chinook runsize at Lower Granite Dam with mitigation hatchery runsize expectation upstream of Lower Granite Dam.

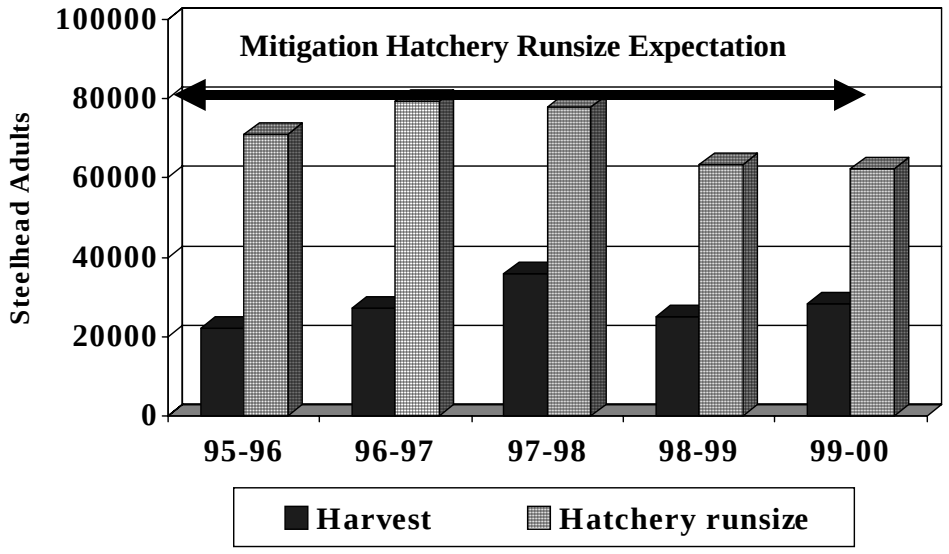

Figure 6. Idaho hatchery steelhead sport harvest and hatchery steelhead runsize at Lower Granite Dam with mitigation hatchery runsize expectation upstream of Lower Granite Dam.

---

such as additional screens and diversion consolidation. The Department will work with other fish managers to experiment with fertilization of selected spawning and rearing tributaries to assess potential improvement in juvenile number and survival and whether such improvement results in increased adult return of salmon and steelhead.

The Department will seek to ensure sufficient returns of anadromous fish to Idaho waters to perpetuate both naturally- and hatchery-produced runs and to allow sport harvest through negotiation or legal means. Efforts will be continued to ensure a fair allocation of the available harvest of anadromous fish among the various Idaho user groups when a surplus is available. Tribal ceremonial fisheries will continue to take precedence over sport fisheries. The Department will work with Idaho Indian Tribes to develop ceremonial harvest opportunities in years when surplus fish for subsistence harvest are not available. When surplus is sufficient for tribal subsistence harvest, both tribal and sport fisheries are expected to access harvestable surplus.

8. Provide Additional Angling Information To The Public.

During this six-year planning period, the Department will continue its production of maps, brochures, and other information to make it easier for the public to understand and utilize their fishery resource. "Angler's Guide" brochures have been developed for major lowland lakes, urban fisheries, and reservoirs, which will include lake maps, location of angler facilities, information on species present, and angler tips. Other brochures will be developed as needed. Adjunct to that will be development or expansion of informational type signs in high use areas (boat ramps, parks, trailheads, etc.), which may include brochures and maps. Location of hatchery-stocked trout will be advertised and maps made available through vendors and Department employees to direct anglers to these areas. The current methods for disseminating information will be expanded where possible. This includes radio, television, newspapers, and Department publications.

Correct identification of fish is critical for optimum fishery response to special regulations and for protection of ESA protected species. Recent research conducted by the Department indicates that many anglers are unable to identify various species of salmonids and that aggressive on-site education campaigns can dramatically reduce misidentification and improve regulation awareness. During this six-year planning period, the Department will improve angler ability to identify various fish and to increase awareness of regulations using a combination of methods already tested and those remaining to be developed. A sustained funding effort will likely be required to attain identification rates above 90% for some species.

9. Provide Increased Access, Particularly for Bank Anglers.

Approximately $1,500,000 per year will be expended in the next six years for the maintenance of existing or acquisition and development of new boating and fishing access facilities. Funding will be provided through federal excise taxes on fishing and boating equipment administered under the Sport Fish Restoration Program. The Department will continue its programs to improve its relations with landowners, acquire easements through leasing or purchase, and develop key areas to provide access for anglers. Additional fishing docks and handicap access facilities will be provided at public fishing lakes with limited fishing access. Additional boat ramps and docks will be built or existing ones repaired or replaced where appropriate.

10. Provide Educational Programs to Encourage Children to Fish.

Coupling new water, better family-oriented facilities, and additional access areas with more educational programs can fulfill the Department's desire to encourage children to start fishing. The Department annually conducts fishing clinics, in-classroom education, and rod-loaner programs to support new anglers. During this six-year planning period, the Department will continue to facilitate annual youth fishing clinics around the state to teach angler skills, fishing ethics, and an appreciation of habitat requirements needed to support fish populations. The growing interest in cooperative educational programs such as the *Trout In The Classroom,* and the *Idaho Salmon and Steelhead Days* will be fostered.

11. Simplify and Standardize Fishing Rules.

The Department will continue efforts to standardize length limits or bag limits where appropriate to make it easier for anglers to understand the fishing regulations. Standard year-round seasons for lakes and reservoirs, standard stream fishing opening dates, and liberalized regulations have been implemented to make regulations simpler and more understandable where they do not jeopardize fish populations. During this planning period, the Department will increase the use of signs about regulations and landmarks to identify different regulation areas and to inform the public about species listed under the Endangered Species Act.

The angling public has told the Department that changes in fishing rules are confusing. However, the Department must respond to biological issues. Rule changes will be recommended to the Commission on the basis of biological needs during development of the state's biennial fishing rules during this planning period. This six-year management plan will be used to guide future accommodation of nonbiological factors in rulemaking. However, the Commission holds authority to accommodate additional factors in rulemaking, such as sociological needs, at any time.